Environmental Management-Project Definition Rating Index (EM-PDRI)



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Office of Project Management (EM-6)

OVERVIEW

- What Is The EM-PDRI
- EM-PDRI Team
- EM-PDRI Development Approach
- *Application/Scoring*

ENVIRONMENTAL MANAGEMENT (EM) PROJECT DEFINITION RATING INDEX (PDRI)

- What is EM-PDRI
 - Project Management Tool Based On Construction Industry Institute (CII) Model To Increase Likelihood of Project Success
 - CII has 100 Members Including Bechtel, Fluor-Daniel, MK, DOW, Dupont, Exxon, Army Corps of Engineers, And Brown & Root
 - Rating Elements For Cost, Schedule, Scope, Management Planning And Control, And External Factors

Environmental Management's Project Definition Rating Index (EM•PDRI)

The Environmental Management (EM) PDRI Team concurs that Revision 1, January, 2001, reflects the requirements in DOE Order 413.3 and the Draft Manual for Program and Project Management, October, 2000. As such, the EM•PDRI provides a sound basis for evaluating the "readiness to proceed" at Critical Decisions for various project phases.

The team recognizes that changes may be needed as more experience is gained from the use of this project planning tool, and that EM is committed to reviewing and revising the EM•PDRI, as appropriate.

PARTICIPANT	ORGANIZATION	SIGNATURE	DATE
Dave Pepson EM•PDRI Team Leader	DOE-HQ, Office of Project Management (EM-6)	Card Dyson	11/30/00
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EM-PDRI APPROACH

- Used CII PDRI As A Model
- Modified For EM Projects:
 - Traditional Conventional
 - Environmental Remediation
 - Facility Disposition

APPLICATION/SCORING

- EM-PDRI is required prior to Critical Decision approval.
- EM-PDRI is also a useful forward planning tool, and a useful tool for periodic assessment of project status.

Comparison of CD's by Project Type

Traditional/Conventional Projects

Mission Need	Conceptual Design	Preliminary Design	Final Design	Construction	Start of Operations
C	D-0 CI	D-1 C[)-2 CE)-3 C[0-4

Environmental Restoration Projects

Mission Need/Proposed Plan	Performance Baseline/Start of work	Construction/ Remediation	Operations/ Project Closeout
CD-0/	CD-1 CD-1	2/CD-3 CF)_/

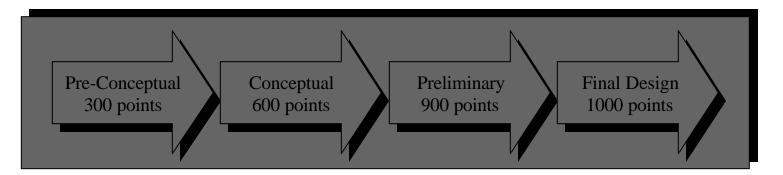
Facility Disposition Projects

Mission Need	Combined Conceptual/ Preliminary Design	Fina Desig	D	&D	Project Closeout
C)-0	CD-1/2	CD-3	CD-4	

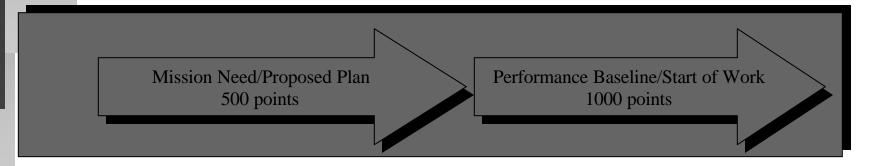
APPLICATION/SCORING

- Five Rating Areas:
 - Cost
 - Schedule
 - Scope/Technical
 - Management Planning and Control
 - External Factors
- Target scores vary by project phase (maximum of 1000 points)

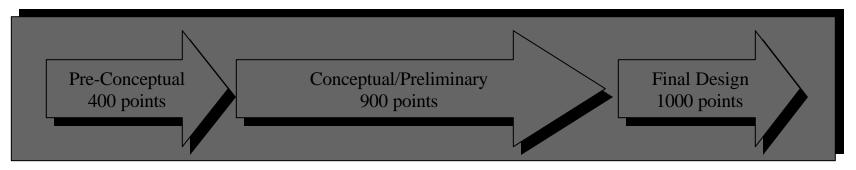
TRADITIONAL PROJECT



ENVIRONMENTAL REMEDIATION PROJECT



FACILITY DISPOSITION PROJECT



EM•PDRI Traditional Project Cost Section

			Maturity Level			
Rating Element		Weighting Designation	Pre- Conceptual CD-0	Conceptual CD-1	Preliminary CD-2	Final CD-3
A1	Cost Estimate	Н	1	3	5	5
A2	Cost Risk/ Contingency Analysis	P	1	3	5	5
A3	Funding Profile/ Requirements	Н	1	3	4	5
A4	Independent/ Non-Advocate Cost Estimate Review	Р	N/A	N/A	5	5
A5	Life-Cycle Cost	P	1	4	5	5
A6	Forecast of Cost at Completion	P	N/A	N/A	3	5
A7	Cost Estimate for Next Phase Work Scope	Р	5	5	5	5

Construction Industry Institute

ABB CE Services, Inc.

ABB Lummus Crest, Inc.

Aluminum Company of America

AMEC Holdings, Inc.

Amoco Corporation

Anheuser-Busch Companies, Inc.

Aramco Services Company

AT&T

Atlantic Richfield Company

BE&K Construction Company

Bechtel Group, Inc.

Belcan Engineering Group, Inc.

Black & Veatch

BP Oil Company

Brown & Root, Inc.

Burns and Roe Enterprises, Inc.

Cherne Contracting Corporation

Chevron Corporation

Cianbro Corporation

Consolidated Edison Company of New

York, Inc.

Day & Zimmermann International, Inc.

Dillingham Construction Holdings, Inc.

Dow Chemical U.S.A.

DuPont

Eastman Chemical Company

Eichleay Holdings, Inc.

Elf Atochem North America, Inc.

Eli Lilly and Company

Enron Corporation

Exxon Research & Engineering

Company

Fluor Daniel, Inc.

FMC Corporation

Ford, Bacon & Davis, Inc.

Foster Wheeler USA Corporation

Fru-Con Corporation

General Motors Corporation

Gilbert/Commonwealth, Inc.

Glaxo, Inc.

Graycor, Inc.

Gulf States, Inc.

Guy F. Atkinson Company of California

H. B. . Zachry Company

Hoechst Celanese Corporation

Hoffmann-LaRoche, Inc.

Construction Industry Institute (continued)

Houston Lighting & Power Company Huber, Hunt & Nichols, Inc. **Hudson Engineering Corporation** International Paper Company International Technology Corporation J.A. Jones Construction Company Jacobs Engineering Group, Inc. **James River Corporation** John Brown E&C Kiewit Construction Group, Inc. Lever Brothers Company Litwin Engineers & Constructors, Inc. Marshall Contractors, Inc. Merck & Co., Inc. **Mobile Corporation Morrison Knudsen Corporation** Naval Facilities Engineering Command North Bros. Company Northern States Power Company **Ontario Hydro** Phillips Petroleum Company Raytheon Engineers & Constructors International

Rohm and Haas Company **Rust International Corporation** S&B Engineers and Constructors, Ltd. Shell Oil Company Skanska Engineering & Construction, Inc. Stone & Webster Engineering Corp. Sun Company, Inc. **Sverdrup Corporation** Tennessee Valley Authority Texaco, Inc. The M. W. Kellogg Company The Parsons Corporation The Procter & Gamble Company Torcon. Inc. TPA. Inc. **Turner Construction Company** U.S. Army Corps of Engineers U.S. Department of Commerce U.S. Department of State **Union Carbide Corporation** Weyerhaeuser Paper Company

Woodward-Clyde Consultants